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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,002	05/14/2001	Franz-Josef Carduck	D 8927B-OC/FOHPT	1201

7590 08/15/2005

COGINS CORPORATION
Patent Department
300 Brookside Avenue
Ambler, PA 19002

EXAMINER

CHAMBERS, A MICHAEL

ART UNIT PAPER NUMBER

3753

DATE MAILED: 08/15/2005

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 14

Application Number: 09/855,002
Filing Date: May 14, 2001
Appellant: CARDUCK ET AL.

John E. Drach
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 18, 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims stand and fall together, however, does not provide reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

3,936,262	HEHL	3-1976
3,899,00	OHLSWAGER ET AL	08-1975
5,154,353	PLACHY	10-1992
4,479,509	DEAR ET AL	10-1984

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 18, 20, and 22 stand rejected under *35 USC 102(b)* as being anticipated by Hehl.

Claims 23-29 stand rejected under *35 USC 102(b)* as being anticipated by Ohlswager et.

Claims 1-14, 16, 17, 19, 21 and 30 stand rejected under *35 USC 103(a)* as being unpatentable over Plachy in view of Dear et al (4,479,509)(Figures 1 and 2).

(11) Response to Argument

1. Claims 18, 20, 22 were rejected under 35 U.S.C. 102(b) as being anticipated by Hehl as cited in the previous Office action. Contrary to appellants' remarks, the fluid system of Hehl does "distribute liquid" and includes a drainage pipe (i.e., a plurality of drainage pipes). Fluid clearly drains from any of the plurality of drainage pipes 22, 12 and 13. Nozzle 2 which is in fluid communication with pipes 13 includes a tapered portion. Connector 2 is being read as a portion of the distributor and the inlet opening adjacent "b" extends "...upward from the bottom...". Hehl's distributor clearly distributes the temperature sensitive "liquid" plastic which is then drained through a plurality of nozzles (claims 18, 20 and 22). All of the "drainage pipes" include a portion of which extends from the bottom of the distributor.

2. Claims 23-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohlswager et al as cited in the previous Office action. Note the hood 16. Plate means 16 is readable on "dome" recitation (claim 29). Clearly "plate means" 16 does cover the inlet opening to "pipe means 12. See Figure 1. An annular inner wall 17 is shown (claim 28). Contrary to appellants' remarks, claim 29 does include "tapering drainage pipe" recitation. The base of "plate means" 16 clearly extends over the drainage pipes 12. As stated in the final rejection, clearly "plate means" 16 of Ohlswager et al (claims 23-29) covers the inlet opening to pipe 12 (i.e. a dome and is in direct "line" with the inlet inflow-claim 23).

3. Claims 1-14 and 16-17, 19, 21 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plachy in view of Dear et al(4,479,509; Figures 1 and 2) as cited in the previous Office action. Note the tapered portion 11 of "drainage pipes" 13-16 of Plachy. With regard to the recitation added by amendment filed January 15, 2003, that the "...nozzle is comprised of a material resistant to the adherence of solids...", all nozzles, due their design of a tapered smooth cross-section, cause increased fluid velocity which reduces "caking" of material and "...enact even distribution of a feed liquid...". The distributor nozzles 13-16 of Plachy are obviously made of metal. The inner wall of the nozzle portion of the distributor of Plachy is made of plastic as shown by the cross hatching and as such "...provides resistance to the adherence of solids..." . Prevention of caking is a result of the material of construction of the distributor nozzle. Both the shape and the selection of a smooth inner surface of the portion 11 of the distributor also prevents such caking as is disclosed by the specification of the instant application and shown by the patent to Plachy. Plachy disclose the claimed invention except for the recitation of "...the inner wall of the nozzle is comprised of a particular material resistance to the adherence of solids..." as taught by Dear et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a drainage pipe 2 of Plachy et al to be lined as taught by 36 of Dear et al in order to provide a more efficient transition of

the fluid flow through the drain pipe and "...help to resist the adherence of solids to the drainage pipe. With regard to claim 30, note the sleeve 36 of Figure 1 of Dear et al. By definition a weir may be defined as a 'vertical plate with a notch' through which fluid flows and not necessarily the narrower definition given by applicants in their response. A weir is clearly shown in Figure 1 of Plachy. With regard to the definition of a "v-notch weir" in the book Streeter Fluid Mechanics the author clearly defines such a weir as a "...vertical plate with a notch of a specific angle cut in a top and placed in a channel...". Such a geometric configuration defining a weir is shown in Figure 1 of Plachy (claims 1-14 and 16, 17, 19, 21 and 30). No 'hindsight use' is intended in the rejection. The patent to Dear et al is applied as a teaching of lining of the inner wall of a nozzle to make it resistant to the adherence of solids and to provide more efficient transition of fluid flow. As stated in the final rejection by their design all nozzles which are formed by a reduced tapered cross section cause an increase in the fluid velocity which reduces the 'caking' of material. Contrary to appellants' remarks, the apparatus of Plachy distributes and controls flow via the plurality of weirs shown in Figure 1. Motivation is clear in that both patents (Plachy and Dear et al) are drawn to fluid systems including metered valved flow control causing a predetermined pressure drop in the fluid flow path. Case law cited in the response to the final rejection has previously been considered.

208 Fluid Mechanics
 Streeter Fluid Mechanics
 Victor L. Streeter, McGraw-Hill
 New York 1971.

When dimensional analysis is used, the variables in a problem must be known. In the last example if kinematic viscosity had been used in place of dynamic viscosity an incorrect formula would have resulted.

example 4.2 A V-notch weir is a vertical plate with a notch of angle ϕ cut into the top of it and placed across an open channel. The liquid in the channel is backed up and forced to flow through the notch. The discharge Q is some function of the elevation H of upstream liquid surface above the bottom of the notch. In addition the discharge depends upon gravity and upon the velocity of approach V_0 to the weir. Determine the form of discharge equation.


Application/Control Number: 09/855,002

Page 6

Art Unit: 3753

For the above reasons, it is believed that the rejections should be sustained.

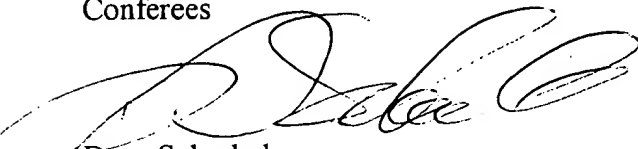
Respectfully submitted,



A. Michael Chambers
Primary Examiner
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amc

January 12, 2005

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